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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application: Frank Sansevero, et al. International App. No.: PCT/US03/10362
Serial No.: 10/550,927 International Filing Date: 04 April 2003
Filed: 09/28/2005
Examiner: Prakasam, Ramya G.
For: COMBINED TRAFFIC FLOW AND MAINTENANCE
INFORMATION DISPLAY FOR A PASSENGER CONVEYOR

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Appellant now submits its brief after receiving the Notice of Panel Decision from Pre-Appeal Brief Review that was mailed on December 27, 2007. Payment of fees in the amount of \$510.00 are made by the enclosed Credit Card Payment Form.

Real Party in Interest

Otis Elevator Company is the real party in interest. Otis Elevator Company is a business unit of United Technologies Corporation.

Related Appeals and Interferences

There are no related appeals or interferences.

Status of the Claims

Claims 1-30 are pending.

Claims 4-7 and 17-19 were indicated as being allowable if rewritten in independent form.

Claims 4-7 and 17-19 are not on appeal.

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Claims 1-3, 8-16 and 20-30 are on appeal.

Claims 1-2, 8, 10-11, 13-15, 20 and 29 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,782,330 (the *Mehlert* reference).

Claims 3, 12, 16 and 22 stand rejected under 35 U.S.C. §103 as being unpatentable over the *Mehlert* reference in view of U.S. Patent Application Publication No. 2003/0000798 (the *Williams* reference).

Claims 9, 21, 23-27 and 30 stand rejected under 35 U.S.C. §103 as being unpatentable over the *Mehlert* reference in view of U.S. Patent No. 5,708,416 (the *Zaharia* reference).

Claim 28 stands rejected under 35 U.S.C. §103 as being unpatentable over the *Mehlert* reference in view of U.S. Patent No. 4,798,274 (the *Saito* reference).

Status of Amendments

There are no unentered amendments.

Summary of Claimed Subject Matter

Appellants' claims are directed to a unique display having two modes of operation, one for passenger information and another for maintenance information useful to a mechanic or technician. With Appellants' claimed invention, a mechanic or technician does not have to shutdown an escalator and crawl inside the machine space in order to get access to the controller to determine what is wrong with the unit. It is possible, for example, for a mechanic to evaluate the problem with little or no down time for the escalator. Since escalators tend to be in high traffic locations, building owners or occupants are not fond of having them shutdown. Combining an external display with the traffic direction indicator in a multi-mode display as claimed saves cost, for example.

Appellants' claim 1 is directed to a device for use with a passenger conveyor 20. The claimed device includes a display 40 that provides a visible indication of a direction of movement of the conveyor (e.g., traffic flow). (Page 4, lines 3-5) The display also provides a variable, visible indication of maintenance information regarding the conveyor. (Page 4, lines 16-21)

Independent claim 13 recites a passenger conveyor 20 comprising a plurality of steps 22 that are moveable along a selected path between two landings 24 and 26. (Page 3, lines 13-14) A machine 51 selectively moves the steps. (Page 5, lines 23-25) A display 40 is near one end of the conveyor 20. The display provides a visible indication of a direction of movement of the conveyor. (Page 4, lines 3-5) The display also provides a visible indication of maintenance information regarding the conveyor. (Page 4, lines 16-21)

Independent claim 25 recites a device for use with a passenger conveyor comprising a display 40 that provides a visible indication of a direction of movement of the conveyor (page 4, lines 3-5) and a visible indication of maintenance information regarding the conveyor (page 4, lines 16-21). A transmitter 62 is remote from the display 40 and comprises at least one switch 64 that can be manipulated for manually controlling the display using a wirelessly communicated signal from the transmitter 62. (Page 6, lines 10-18)

Dependent claims argued separately include claims 29 and 30 which specifically recite that the two visible indications of the display are distinct and separate. (Page 4, lines 3-5 and 16-21) Dependent claim 8 recites a switch 52 for selectively viewing maintenance information on a second display panel 48. (Page 6, lines 5-9)

Grounds of Rejection to be Reviewed on Appeal

Claims 1-2, 8, 10-11, 13-15, 20 and 29 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,782,330 (the *Mehlert* reference).

Claims 3, 12, 16 and 22 stand rejected under 35 U.S.C. §103 as being unpatentable over the *Mehlert* reference in view of U.S. Patent Application Publication No. 2003/0000798 (the *Williams* reference).

Claims 9, 21, 23-27 and 30 stand rejected under 35 U.S.C. §103 as being unpatentable over the *Mehlert* reference in view of U.S. Patent No. 5,708,416 (the *Zaharia* reference).

Claim 28 stands rejected under 35 U.S.C. §103 as being unpatentable over the *Mehlert* reference in view of U.S. Patent No. 4,798,274 (the *Saito* reference).

ARGUMENT

All claims are allowable because there is no *prima facie* case of anticipation or obviousness against any of Appellants' claims.

The rejection of claims 1-2, 8, 10-11, 13-15, 20 and 29 under 35 U.S.C. §102(b) must be reversed.

There is no *prima facie* case of anticipation because the display in the *Mehlert* reference relied upon by the Examiner does not have two different visible indications provided by a display as recited in Appellants' claims. The Examiner relies upon the traffic light 36 of the *Mehlert* reference as indicating which direction a passenger can enter the conveyor such that the traffic light 36 corresponds to the indication of a direction of conveyor movement in Appellants' claims. The Examiner then points to the same element (although the Examiner references the element 44 in the Office Action, the only display associated with the element 44 is the display of traffic light 36) when the Examiner contends that *Mehlert* also has "a variable, visible indication of maintenance

information regarding the conveyor.” The problem with the Examiner’s interpretation is that it attributes two different indications to a single indicator that is not capable of providing both indications. A single traffic light 36 may provide an indication of a direction of conveyor movement and that is consistent with what the *Mehlert* reference teaches. That same traffic light, however, does not provide a different visible indication of different information such as maintenance information.

Appellants’ claims require two different visible indications on the claimed display. The Examiner relies upon the single visible indication in the *Mehlert* reference (i.e., the traffic light 36 on the display 44) as allegedly anticipating both of Appellants’ visible indications. As the *Mehlert* reference does not include two different visible indications (i.e., it only has the single traffic light 36), there is no *prima facie* case of anticipation.

Additionally, the Examiner improperly contends that the display 44 of the *Mehlert* reference provides a visible indication of maintenance information. In column 3, beginning at line 46, the *Mehlert* reference describes the display 44 as “having markings to indicate the operational status of the escalator 12. For instance, the traffic light 36 may include a red colored horizontal line and a green arrow. The horizontal line is used to indicate that the escalator 12 is operating in a direction opposite to the passengers approaching the face of the traffic light 36, or that the escalator 12 has been stopped. The green arrow is used to indicate that the escalator 12 is operating and a direction of operation of the escalator 12.” From the express teachings, *Mehlert*’s traffic light is *only* capable of telling *passengers* whether they will be carried by an escalator if they approach it from a particular direction (e.g., facing the display 44).

The Examiner improperly contends that *Mehlert*’s traffic light 36 constitutes “maintenance information” because it “provides the operational status of the conveyor, including whether the

conveyor is currently running or whether it is stopped.” Appellants’ respectfully submit that that is not a reasonable interpretation of “maintenance information” as that term is used in Appellants’ description and as that term is used by those of skill in the art.

While the Patent Office is entitled to give claims their broadest, reasonable interpretation, that does not allow for disregard of Appellants’ specification and ordinary, customary use of a term in the art. MPEP 2111 requires that the broadest reasonable interpretation be “consistent with the specification” and “must also be consistent with the interpretation that those skilled in the art would reach.”

Appellants’ “maintenance information” is something other than an indicator to a *passenger* whether a conveyor is moving in a particular direction or not moving at all. Maintenance information is something else and provides information to a mechanic or maintenance technician, for example, regarding the conveyor. One skilled in the art of passenger conveyors who understands what type of maintenance information is typically used for servicing such a conveyor would not consider an indication of a direction of movement or non-movement to be “maintenance information.” Therefore, the Examiner’s interpretation is not reasonable and not consistent with the requirements of MPEP 2111.

Additionally, Applicants’ specification must be consulted to determine what a reasonable interpretation of “maintenance information” would be. On page 4 of Appellants’ specification, beginning at line 16, examples of maintenance information are provided including “hours of operation, energy consumption, maintenance history and fault code indicators such as the fault codes used in the event that there is an interruption in operation.” It follows that the Examiner’s interpretation of maintenance information (i.e., a traffic light that tells a passenger whether they are

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approaching an escalator in the right direction) does not take into account Appellants' specification and is not reasonable.

The *Mehlert* reference does not anticipate any of Appellants' claims because it does not include a display of maintenance information as required by Appellants' claims. Even if a red traffic light when a conveyor is stopped could be reasonably construed as "maintenance" information, is not variable as claimed by Appellants. At best, a red traffic light would be a non-variable indication. In other words, a single red traffic light at best only indicates that an escalator is stopped and cannot be varied to provide any other sort of information. Even if the unreasonable interpretation of "maintenance information" were sustained by this Board, the rejection still has to be reversed because there is no variable display of such "maintenance" information in the *Mehlert* reference. Appellants' claims 1 and 13 on the other hand provide a variable indication.

The rejection under 35 U.S.C. §102(b) must be reversed.

Claim 8

There is no *prima facie* case of anticipation of claim 8, in part, because claim 3 (from which claim 8 depends) is not anticipated as admitted by the Examiner who did not reject claim 3 under 35 U.S.C. §102.

Claim 29

It should also be noted that claim 29 specifically recites distinct and separate indications. There is no reasonable interpretation of *Mehlert's* single traffic light 36 that could satisfy claim 29.

**The rejection of claims 3, 12, 16 and 22 under
35 U.S.C. §103 based upon the *Mehlert* and *Williams*
references must be reversed.**

The Examiner's proposed combination of the *Mehlert* and *Williams* references cannot be made and there is no *prima facie* case of obviousness. The Examiner proposes to add information from a monitor display 246 of the *Williams* reference to the display 44 of the *Mehlert* reference. As described above, the *Mehlert* reference display 44 is intended to display information for *passengers* so they can know if they are approaching an escalator in the correct direction. The type of information discussed in the *Williams* reference is not useful to a passenger of an escalator and, therefore, would not be useful on *Mehlert's* display. In other words, there would be no benefit to adding the type of information discussed in the *Williams* reference to the display of the *Mehlert* reference. Without any benefit to the proposed combination, the legally required reason for the proposed combination is absent and there is no *prima facie* case of obviousness.

Additionally, the *Mehlert* reference teaches away from the combination. The *Mehlert* reference expressly teaches that its display 44 is intended to provide information of use to passengers. The information from the *Williams* reference does not provide any useful information to passengers of a conveyor. Therefore, the *Mehlert* reference teaches away from including the type of information that the Examiner is extracting from the *Williams* reference when attempting to manufacture a *prima facie* case of obviousness. The information from the *Williams* reference does not provide any benefit to a passenger who would be looking at the display 44 of the *Mehlert* reference, which teaches away from the combination to begin with.

The only possible justification for attempting to combine the *Mehlert* and *Williams* references is found by consulting Appellants' specification and claims in the first place.

Appellants' disclosure and claims cannot be used for hindsight reasoning as an alleged basis for combining the references.

The rejections based upon the proposed combination of the *Mehlert* and *Williams* references must be reversed.

The rejection of claims 9, 21, 23-27 and 30 under 35 U.S.C. §103 based on the *Mehlert* and *Zaharia* references must be reversed.

The Examiner's proposed combination of the *Mehlert* and *Zaharia* references cannot be made. The transmitters in the *Zaharia* reference are intended to provide information to an escalator controller to take action responsive to activation of a safety device. Such functionality is not available in the *Mehlert* reference and the type of information provided by the transmitters in the *Zaharia* reference has no usefulness with the display 44 of the *Mehlert* reference. In other words, the teachings of the *Zaharia* reference extracted by the Examiner have no usefulness in the context of the *Mehlert* reference and provide no benefit to the operation of *Mehlert's* arrangement. Therefore, the required reason for making the combination does not exist and the combination cannot be made. There is no *prima facie* case of obviousness.

Even if the combination could be made, the result does not establish a *prima facie* case. The transmitter signals in the *Zaharia* reference are not used to control a display as recited in Appellants' claims. Only additional hindsight reconstruction and modification from outside the references could even possibly bring the proposed combination in line with Appellants' claims.

Claim 30

There is also an additional reason why there is no *prima facie* case of obviousness against claim 30. That claim specifically recites separate and distinct visible indications. As discussed above, the *Mehlert* reference does not have separate and distinct visible indications of direction

information on the one hand and maintenance information on the other hand. The Examiner relies upon the same traffic light 36 of the display 44 for both of the claimed visible indications. The same traffic light display cannot be separate and distinct from itself. Therefore, even if one could add one of the transmitters from the *Zaharia* reference to the arrangement of the *Mehlert* reference, the result is not the same as what is recited in claim 30 and there is no *prima facie* case of obviousness.

**The rejection of claim 28 under 35 U.S.C. §103
based upon the *Mehlert* and *Saito* references
must be reversed.**

The Examiner's proposed combination of the *Mehlert* and *Saito* references cannot be made. The Examiner proposes to modify the *Mehlert* reference by moving *Mehlert's* display onto the passenger conveyor structure. That modification cannot be made because *Mehlert* expressly teaches having a different arrangement. The *Mehlert* reference is specifically intended to provide a display device that is separate from the passenger conveyor and positioned at a location apart from the conveyor. That type of arrangement achieves *Mehlert's* stated objectives. (See, e.g., column 1, lines 54-65.) *Mehlert's* express teaching of keeping the information display separate from the conveyor teaches away from the Examiner's proposed combination.

Additionally, the proposed modification cannot be made because it interferes with the ability of *Mehlert's* arrangement to achieve its intended result. *Mehlert* expressly teaches, "The location of the display separate[ly] from the conveyor permits the display to be positioned such that approaching passengers may view the information *prior to arriving* at the conveyor." (Col. 1, lines 61-64) (Emphasis added) If one were to modify the *Mehlert* reference as proposed by the Examiner, that ability would be lost and such a modification cannot be made. There is no *prima facie* case of obviousness against claim 28.

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CONCLUSION

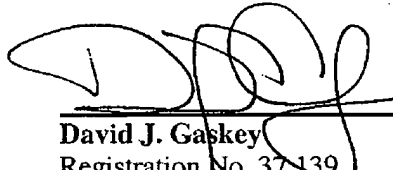
The references relied upon by the Examiner (alone or in combination) do not provide the unique arrangement recited in Appellants' claims. All rejections must be reversed.

Respectfully submitted,

CARLSON, GASKEY & OLDS, P.C.

January 28, 2008

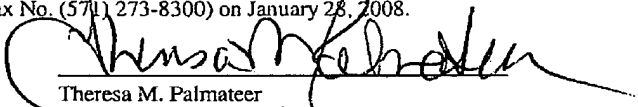
Date



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CERTIFICATE OF FACSIMILE

I hereby certify that this Appeal Brief, relative to Application Serial No. 10/550,927, is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571) 273-8300) on January 28, 2008.



Theresa M. Palmateer

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APPENDIX OF CLAIMS

1. A device for use with a passenger conveyor, comprising:
a display that provides a visible indication of a direction of movement of the conveyor
and a variable, visible indication of maintenance information regarding the conveyor.
2. The device of claim 1, wherein the display operates in a first mode to provide the direction indication and a second mode to provide the maintenance information.
3. The device of claim 1, wherein the display includes a first display panel that provides at least the direction indication and a second display panel that provides at least some of the maintenance information.
8. The device of claim 3, including at least one switch supported near the second display panel, the switch being actuatable to selectively view available maintenance information.
9. The device of claim 1, including a transmitter remote from the display and wherein the transmitter provides a wirelessly communicated signal that controls the display.
10. The device of claim 1, including a controller that controls the display and wherein the controller automatically sets the indication to correspond to a direction of movement of the conveyor or the maintenance information.
11. The device of claim 10, wherein the controller uses information regarding an operation of a machine of the conveyor to determine the corresponding indication.
12. The device of claim 1, wherein the display provides the visible indication of maintenance information including at least one of a fault code indicator, operation time information, energy consumption information or maintenance history information.

13. A passenger conveyor, comprising:
a plurality of steps that are moveable along a selected path between two landings;
a machine that selectively moves the steps; and
a display near one end of the conveyor that provides a visible indication of a direction of movement of the conveyor and a variable, visible indication of maintenance information regarding the conveyor.
14. The passenger conveyor of claim 13, wherein the display operates in a first mode to provide the direction indication and a second mode to provide the maintenance information.
15. The passenger conveyor of claim 14, including a controller that controls the mode of operation of the display and wherein the controller uses at least information regarding the operation of the machine to determine the corresponding indication on the display.
16. The passenger conveyor of claim 13, wherein the display includes a first display panel that provides at least the direction indication and a second display panel that provides at least some of the maintenance information.
20. The passenger conveyor of claim 13, including at least one switch supported near the display, the switch being actuatable to selectively view available indications on the display.
21. The passenger conveyor of claim 13, including a transmitter remote from the display and wherein the transmitter provides a wirelessly communicated signal that controls the display.
22. The passenger conveyor of claim 13, wherein the display provides the visible indication of maintenance information including at least one of a fault code indicator, operation time information, energy consumption information or maintenance history information.

23. The device of claim 9, wherein the transmitter includes at least one switch that allows an individual to manually control whether the display provides the direction indication or the maintenance information indication responsive to the wireless signal.
24. The passenger conveyor of claim 13, wherein the transmitter includes at least one switch that allows an individual to manually control whether the display provides the direction indication or the maintenance information indication responsive to the wireless signal.
25. A device for use with a passenger conveyor, comprising:
a display that provides a visible indication of a direction of movement of the conveyor and a visible indication of maintenance information regarding the conveyor; and
a transmitter remote from the display that comprises at least one switch that can be manipulated for manually controlling the display using a wirelessly communicated signal from the transmitter.
26. The device of claim 25, wherein the transmitter is configured to allow an individual to page through indications on the display using a wirelessly transmitted signal from the transmitter.
27. The device of claim 25, wherein the transmitter is configured to allow an individual to set a traffic flow indicator of the display using a wirelessly transmitted signal from the transmitter.
28. The passenger conveyor of claim 13, comprising
a passenger conveyor structure associated with the steps and wherein the display is supported on the structure.
29. The device of claim 1, wherein the indication of a direction of movement is distinct and separate from the indication of maintenance information.
30. The passenger conveyor of claim 13, wherein the indication of the direction of movement is separate and distinct from the indication of maintenance information.

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EVIDENCE APPENDIX

None.

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RELATED PROCEEDINGS APPENDIX

None.